Economical Large Digit Display LD4-IV for analog input signals

4 x 57mm high LED digits

Features

- 57mm high digits (visible to 25m)
- Displays in engineering units (scaleable)
- High brightness LED display
- User selectable decimal point position
- Pushbutton calibration and setup
- Two point calibration. A single point calibration offset can also be entered.
- Special display scaling mode for 4-20mA input allows entry of scaling values without live input.
- Digital filter improves stability. Uses weighted average method to reduce effects of short term interference.
- 2 alarm/control relay outputs. The relays can be configured with high and/or low trip points and for normally open or normally closed operation. Relay trip time and reset delay times can also be set if required.
- Remote input to perform special functions e.g. brightness level switching, high/low memory, peak hold, display hold,setpoint only access, security lockout, tare, zero or calibration scaling switching.
- High and low limits can be set for visual alarm - can be set to cause display to flash the value on the display or to display error message `-or-`
- 18VDC unregulated transmitter supply available on AC powered models
- Rugged, weatherproof, IP65 rated housing
- 2 year guarantee
- Optional serial communications, panel mounting kit and hood removal.

Description

Model LD4-IV accepts ±20mA, 4-20mA, ±100mV, ±1V, ±10V or ±100V inputs. From these inputs the display can be scaled to read in engineering units. A choice of linear or square root law display can be selected. The instruments feature flexible pushbutton scaling and programming with "on display" messages being used to assist in setting up. Two sets of calibration scaling values may be stored, an external input allows switching between scales. An 18VDC unregulated transmitter supply is provided as standard on AC supply models.

Each instrument is supplied with a two control/alarm setpoint relays. Optional outputs include isolated serial retransmission (RS232 or RS485, factory configured, with choice of ASCII or Modbus RTU protocols) and isolated ±12V (24V) transmitter supply.

An external input is configurable to perform one of various functions e.g. zero, tare, scaling, switching, brightness level switching, high/low memory, peak hold, display hold setpoint only access or security lockout. This input can also be used to allow fast and easy access to the alarm setpoints.

The 57mm LED display is housed in a rugged, IP65 rated, UV stabilised ASA enclosure.

Technical Specifications

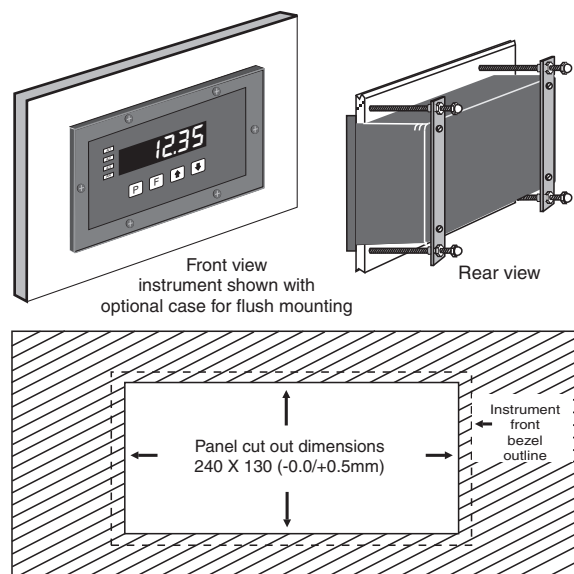|	
Input Types:	±20mA, 4-20mA, ±100mV, ±1V, ±10V or ±100VDC, link selectable
Accuracy:	0.1% of full scale when calibrated
Input impedance:	80Ω nominal (4-20mA or ±20mA input) 1MΩ (DC Volts input)
Sample rate:	4 per second
ADC resolution:	1 in 20,000
Microprocessor:	MC68HC11 CMOS
Ambient Temp:	-10°C to 60°C
Humidity:	5% to 95% non condensing
Outputs:	2 x setpoint relays, form A, rated 5A at 240VAC (resistive load)
Transmitter supply:	18VDC unregulated 20mA max. Available on AC powered models only
Power Supply:	See order code table (type is factory configured)
Power consumption:	AC supply, 15VA max. DC supply, depends on supply voltage, typically 500mA (2Apeak) for 24V using non isolated power supply

Weight and Dimensions

Weight: 1.3kg

Front view

Top view

Side view

Optional hood removal
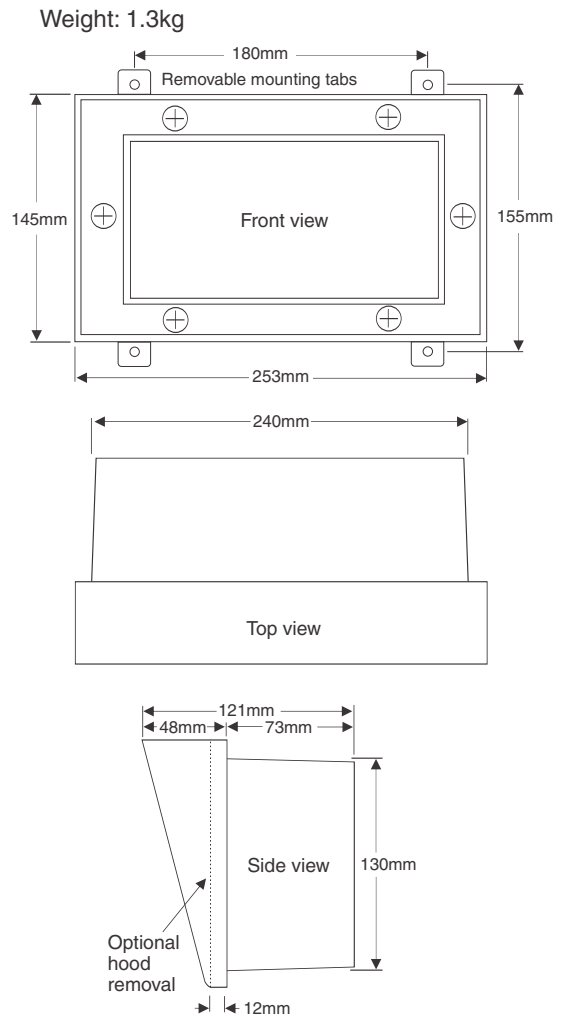
Order Codes

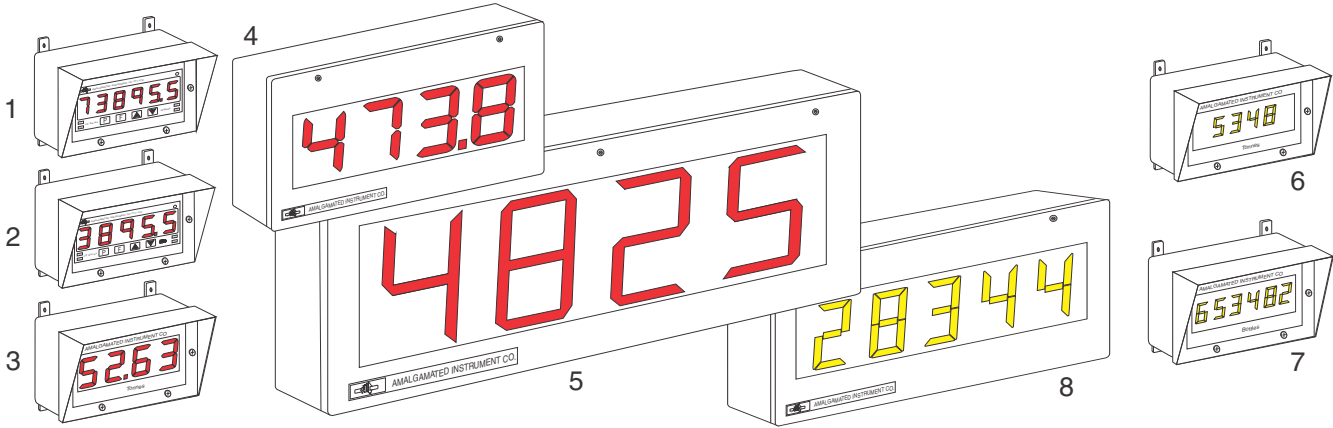| Order Code	Display	Supply Voltage
LD4-IV-240-574	4 x 57mm red LED	240VAC
LD4-IV-110-574	4 x 57mm red LED	110VAC
LD4-IV-DCN-574	4 x 57mm red LED	15-24VDC non isolated
LD4-IV-DC-574	4 x 57mm red LED	12-48VDC isolated

Options

Option Code	Description
LD4-OPT-12	24VDC transmitter supply (±12VDC)
LD4-OPT-C2	RS232 serial comms, non-isolated
LD4-OPT-C4	RS485 serial comms, non-isolated
LD-MTG-PM-KIT	Panel mount kit incl brackets & screws
LD-HOOD-REMOVAL	Front hood removal

Panel Mounting Options

Front view instrument shown with optional case for flush mounting

Rear view

Panel cut out dimensions 240 X 130 (-0.0/+0.5mm)

Instrument front bezel outline

LD4IV-2.5-0

Displays available in Large Digit Series

No.	LED digit size	No of digits	No.	"FLIP" digit size	No of digits
1	38mm	6	6	39mm - selected models	4
2	45mm	5	7	39mm - selected models	6
3	57mm or 58mm	4	8	100mm	4, 5 and 6
4	100mm	4 and 6	38, 58, 100 and 200mm LED displays		
5	200mm	4	are available in red, green, amber or white		

Applications/input types available with large digit display models

- Analog input, process transmitters etc. ±20mA, 4-20mA or ±2.5VDC or ±25VDC
- Pulse input, rate, total, count, grand total (encoders, switches, proximity sensors etc.)
- Temperature - RTD, thermocouple, 4-20mA
- Weighing - 4 or 6 wire mV/V output loadcells
- Pressure measurement - 4 or 6 wire mV/V pressure sensors or 4-20mA analog transducers
- Liquid level measurement - 4 or 6 wire mV/V pressure sensors or 4-20mA analog transducers
- Serial input - RS232, RS485, Serial current loop for slave displays etc.
- Synchronous Serial Interface (SSI) for high accuracy position etc. measurement
- Binary, BCD or Gray Code input
- Real Time clock with alarms
- Multifunction timer - elapsed time, stopwatch, run time etc.

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